## GEOLOGY

PLEASE NOTE: Any changes/updates from the previous year will be BOLDED and ITALICIZED! Pay special attention to any projects with BOLD, ITALICIZED WORDS because they have changed from last year.

# Geology involves studying the earth's crust, its layers, and their history. Youth learn to identify Indiana rocks, minerals, and fossils.

Completion, exhibition participation, and State Fair information for Geology			
Division/Level	Grades (suggested)	Completion Activities Needed*	Maximum State Fair Entries
Beginner	Grades 3-5	Complete 6 Activities*	1 Entry
Intermediate	Grades 6-8	Complete 6 Activities*	1 Entry
Advanced	Grades 9-12	Complete 6 Activities*	1 Entry

\*"Activities" are defined as project manual activities and/or Hendricks County 4-H Workshops related to this topic. Members must be able to prove attendance by getting a signature from 4-H Leader/Project Advisor that conducts the workshop. Activity sheets available in the Extension Office with Geology Project Manuals. Fair Exhibit guidelines are listed below.

**Remember:** All posters, notebooks, and display boards **MUST** include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed. Reference Sheets are available at the Extension Office for use if needed. For personal safety, do not include personally identifiable information such as mailing address or phone numbers on posters/displays/exhibits.

#### **GUIDELINES**:

- 1. Refer to the Hendricks County 4-H Policies, Entry & Exhibit Guidelines for poster and general display guidelines.
- 2. Specimens may also be displayed in a 24" x 18" x 3" collection box, displayed horizontally.
- 3. You may purchase your specimens and may display rocks, fossils, and minerals. If you purchase a specimen, indicate when and where you purchased it and the location where you would expect to find the specimen. If you collect a specimen, indicate the county and township where you found it.
- 4. Posters and display boxes will be exhibited "standing up" at the Indiana State Fair and may be exhibited this way at the county fair. Therefore, you need to mount your specimens securely. Subject matter experts suggest the following methods: soaking ½ cotton ball in Elmer's glue, hot glue, or clear tub sealant. Place the cotton ball in your box and put your rock (or fossil or mineral) on the cotton ball and let sit. It will take 1-2 weeks for Elmer's glue to fully harden. Specimens mounted with Elmer's glue can be removed by soaking the cotton ball in water. Glue remaining on the rock may be brushed off with an old, damp toothbrush.
- 5. When exhibiting rocks show a fresh surface (recently cracked or broken surface) to help judges identify the rock.
- 6. Labels Include the specific geographical location where you would expect to find any specimens as well as where you actually acquired it (found, purchased, etc.).
- 7. Do not identify your specimens any further than phylum and class. There is one exception to this for fossils which are identified to phylum OR class. Class should only be used for fossils of mollusks, backboned animals, and arthropods.

#### **EXHIBIT CLASSES**

#### Beginner: Grades 3-5 (suggested)

 Create an educational poster, notebook, or display about any manual activity or on any geology topic of choice.

#### Intermediate: Grades 6-8 (suggested)

• Create an educational poster, notebook, or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 8-16 minerals and/or fossils.

#### Advanced: Grades 9-12 (suggested)

• Create an educational poster, notebook, or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 15-25 minerals and/or fossils and/or jewel stones. Youth can also design and complete an independent study activity.

### ENTRY & EXHIBIT GUIDELINES FOR THE HENDRICKS COUNTY 4-H FAIR

All exhibits and entries must be made during the period indicated on the fair schedule.

- 1. All exhibits must be picked up during the allotted time period or ribbons and awards will be forfeited.
- 2. All project selections must be made on 4-HOnline. Exhibits that will be presented/displayed at the Hendricks County 4-H Fair must be entered into FairEntry online by designated date.
- 3. Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this handbook as a guide rather than a requirement.
- 4. All non-livestock exhibits must include an exhibit label in the lower right hand corner of their exhibit available from FairEntry. Livestock exhibits will receive stall/cage cards when the project is brought to the fairgrounds.
- 5. In case of an unavoidable circumstance, such as death of animal or drought, which prevents members from exhibiting, insert an explanation in your record book, signed by your parent or guardian and 4-H Leader, and turn book in at the Extension Office to be considered as completing the project.
- 6. White cards ("My Record of Achievement") must be turned in to exhibit in 4-H. Completion cards must be presented at check-in.
- 7. Members are eligible to exhibit their project via Interactive Demonstration during the County Fair, but will not qualify for State Fair. Additionally, Interactive Demonstrations will be a non-judged exhibit option where members may showcase what they have learned in the project to the general public. All projects have the option for Interactive Demonstration exhibit at the county level.
- 8. A 4-H member can exhibit in only one division of each project.
- 9. All exhibitors will receive ribbons. Exhibits in the livestock classes will receive ribbons designated first to tenth places with all exhibits below tenth receiving achievement ribbons. All other projects will be graded as to quality with the highest quality to receive blue ribbons; average quality, red ribbons; below average, white ribbons. Any exhibit not meeting the *guidelines* of the project will be judged on its merit then lowered one placing ribbon. Exhibit entered late, improperly, or not judged will receive a green merit ribbon. Exhibits with exceptional merit will be awarded honor group ribbons as determined by the judge.
- 10. Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect its contents. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right hand corner to place an exhibit tag provided by Purdue Extension Staff.

The dimensions for the poster are 22 inches tall and 28 inches wide.



Exhibit tag comes from information entered on FairEntry prior to the 4-H Fair. The exhibit tag needs to go on the outside of the plastic sleeve in the bottom right hand corner.

- 11. State Fair Livestock 4-H entries are to be entered on the State Fair website by the 4-H member by June 1. The Extension Office will make all other non-livestock project entries through FairEntry.
- 12. Use of skateboards, skates, roller blades, and bicycles are prohibited on the grounds unless in conjunction with a fair event.
- 13. Dogs and other domestic animals are prohibited on the grounds unless in conjunction with a 4-H Fair event or dogs being used as service animals for impaired individuals.
- 14. All judges' decisions will be final.
- 15. All posters, notebooks, and display boards **MUST** include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed. Reference Sheets are available at the Extension Office for use.
- 16. For personal safety concerns, notebooks/posters/displays exhibited should only contain name, county, grade, level, and club if needed. Do not list personally identifiable information (i.e. phone, address, etc.).